must be preceded by the test described in IMO Resolution A.689(17), part 2, paragraph 5.2.

- (e) The test described in IMO Resolution A.689(17), Paragraph 2/5.1.5, must be conducted under the following conditions:
- (1) The test must last 1 hour, with a maximum allowable pressure drop of 5 percent after compensation for changes in ambient temperature and barometric pressure.
- (2) For each degree Celsius of rise in temperature, 0.385 kPa must be subtracted from the final pressure reading (0.031 psig per degree Fahrenheit). For each degree Celsius of drop in temperature, 0.385 kPa must be added to the final pressure reading (again, 0.031 psig per degree Fahrenheit).
- (3) For each mm of mercury of rise in barometric pressure, 0.133 kPa must be added to the final temperature-corrected pressure reading (0.049 psig per 0.1 inch of mercury). For each mm of mercury of drop in barometric pressure, 0.133 kPa must be subtracted from the final temperature-corrected pressure reading (again, 0.049 psig per 0.1 inch of mercury). Corrections for changes in ambient barometric pressure are necessary only if a measuring instrument open to the atmosphere, such as a manometer, is used.
- (f) One liferaft from each lot of fewer than 30 liferafts, and two from each lot of 30 to 50 liferafts, must pass the test described in IMO Resolution A.689(17), part 2, paragraphs 5.1.1 and 5.1.2. If any liferaft fails this test—
- (1) The reason for the failure must be determined;
- (2) Each liferaft in the lot must be examined for the defect and repaired if reparable, or scrapped if irreparable; and
- (3) The lot test must be repeated, including random selection of the liferaft or liferafts to be tested. If any liferafts from the lot have left the place of manufacture, they must be recalled for examination, repair, and testing as necessary; or else the required actions must take place at an approved servicing facility.
- (g) The manufacturer shall arrange for inspections by an accepted independent laboratory at least once in each calendar quarter in which produc-

- tion of liferafts approved by the Coast Guard takes place. The time and date of each inspection must be selected by the independent laboratory, to occur when completed liferafts are in the manufacturing facility and others are under construction. The manufacturer shall ensure that the inspector from the independent laboratory—
- (1) Conducts the inspection and witnesses the tests required by paragraph (f) of this section, and further conducts a visual inspection to verify that the liferafts are being made in accordance with the approved plans and the requirements of this subpart;
- (2) Examines the records of production inspections and tests for liferafts produced since the last inspection by an independent laboratory to verify that each required inspection and test has been carried out satisfactorily;
- (3) Conducts a design audit on at least one liferaft approved by the Coast Guard each year. If possible, different models of liferafts must be examined in the design audit from year to year. To retain Coast Guard approval, the manufacturer shall demonstrate to the inspector during each design audit that—
- (i) Each part used in the liferaft matches the part called for by the approved plans;
- (ii) Each part and subassembly are of the materials and components indicated on the approved plans or their bills of materials; and
- (iii) Each critical dimension is correct as shown either by measurement or by proper fit and function in the next-higher assembly.

[CGD 85-205, 62 FR 25547, May 9, 1997, as amended by USCG-1998-4442, 63 FR 52192, Sept. 30, 1998]

§ 160.151-33 Marking and labeling.

- (a) Whatever other languages they may be in, markings required on each inflatable liferaft and its container must be in English.
- (b) The markings required on the liferaft container under Regulation III/39.7.3 of SOLAS must be on a plate or label sufficiently durable to withstand continuous exposure to environmental conditions at sea for the life of the liferaft. In addition, the container must be marked with the—

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- (1) Manufacturer's model identification; and
- (2) U.S. Coast Guard approval number.
- (c) In addition to the markings required on the inflatable liferaft under Regulation III/39.8 of SOLAS, the liferaft must be marked with the—
- Manufacturer's model identification:
 - (2) Lot number; and
- (3) U.S. Coast Guard approval number.

§160.151-35 Servicing.

- (a) Inspection and repair. Inflatable liferafts carried under the regulations in this chapter, and in chapter I of title 33 CFR, must be inspected periodically by a servicing facility approved by the Coast Guard, repaired as necessary, and repacked. Requirements for periodic inspection and repair of liferafts approved by the Coast Guard appear in §§ 160.151–37 through 160.151–57.
- (b) *Manufacturer's requirements.* To retain Coast Guard approval of liferafts, the manufacturer must:
- (1) Prepare a servicing manual or manuals complying with §160.151-37 to cover each model and size of liferaft that the manufacturer produces. The manual or manuals must be submitted to the Commandant for approval.
- (2) At least once each year, issue a list of revisions to the manual or manuals, and issue a list of bulletins affecting the manual or manuals, that are in effect.
- (3) Make available to each servicing facility approved by the Coast Guard the manual or manuals, the revisions, the bulletins, the plans, and any unique parts and tools that may be necessary to service the liferaft. The plans may be either the manufacturing drawings, or special plans prepared especially for use by servicing technicians. They may be incorporated into the manual or manuals.
- (4) Have a training program complying with §160.151-39 for the certification of servicing technicians.
- (5) Notify the OCMI for the zone in which the servicing facility is located whenever the manufacturer becomes aware of servicing at approved facilities that is not in accordance with the requirements of this subpart, or aware

of falsification by an approved facility of records required by this subpart.

(c) A manufacturer of liferafts not approved by the Coast Guard may establish servicing facilities approved by the Coast Guard for such liferafts in the United States if the manufacturer meets the requirements of paragraph (b) of this section.

§ 160.151-37 Servicing manual.

- (a) The servicing manual must provide instructions on performing the following tasks:
- (1) Removing the inflatable liferaft from the container for testing without damaging the liferaft or its contents.
- (2) Examining the liferaft and its container for damage and wear including deteriorated structural joints and seams.
 - (3) Determining the need for repairs.
- (4) Performing each repair which can be made by a servicing facility.
- (5) Identifying repairs that the manufacturer must perform.
- (6) Determining when liferaft equipment must be replaced.
- (7) Conducting tests required by $\S 160.151-57$.
 - (8) Repacking the liferaft.
- (9) Changing the maximum height of stowage of the liferaft by changing the length of the painter.
- (10) Special equipment limitations or packing instructions, if any, necessary to qualify the liferaft for a particular height of stowage.
- (11) Changing the service of the liferaft by changing the contents of the equipment pack.
- (12) Proper marking of the liferaft container, including approval number, persons' capacity, maximum height of stowage, service (equipment pack), and expiration date of servicing.
 - (13) A list of parts for—
 - (i) Survival equipment;
 - (ii) Compressed-gas cylinders;
 - (iii) Inflation valves;
 - (iv) Relief valves; and
 - (v) Repair equipment.
- (14) The necessary pressures for each size of approved liferaft for conducting the "Necessary Additional Pressure" test required by §160.151-57(k).
- (b) Each revision to a servicing manual, and each bulletin, that authorizes the modification of a liferaft, or that